## COMMONWEALTH OF KENTUCKY

#### BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF NORTH MCLEAN COUNTY WATER DISTRICT FOR ALTERNATIVE RATE ADJUSTMENT

CASE NO. 2017-00253

### NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of August 10, 2017, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's August 10, 2017 Order, North McLean County Water District is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report.

Gwen R. Pinson Executive Director

Public Service Commission

P.O. Box 615

Frankfort, KY 40602

DATED \_\_\_\_\_\_ OCT 1 8 2017

cc: Parties of Record

#### STAFF REPORT

ON

#### NORTH MCLEAN COUNTY WATER DISTRICT

CASE NO. 2017-00253

North McLean County Water District ("North McLean") is a water utility organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides retail water service to approximately 1,298 customers that reside in McLean County, Kentucky.\(^1\) On June 26, 2017, North McLean tendered an application ("Application") to the Commission requesting to increase its water service rates pursuant to 807 KAR 5:076. By letter dated June 30, 2017, the Commission notified North McLean that its application was rejected as deficient. On July 7, 2017, and July 20, 2017, North McLean filed its responses to the filing deficiencies and its Application was accepted for filing on July 20, 2017. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated August 10, 2017.

To comply with the requirements of 807 KAR 5:076, Section 9, North McLean based its requested rates on a historical test period that coincides with the reporting period shown in its most recent Annual Report on file with the Commission at the time it filed the Application, the calendar year ended December 31, 2016. The rates requested by North McLean would increase the monthly bill of a typical residential customer<sup>2</sup> by

<sup>&</sup>lt;sup>1</sup> Annual Report of McLean County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2016 ("Annual Report") at 12 and 48.

<sup>&</sup>lt;sup>2</sup> As provided in North McLean's customer notice, a typical residential customer purchases 6,539 gallons of water per month.

\$3.97, from \$41.83³ to \$45.80, or approximately 9.50 percent, and would generate approximately \$57,402⁴ in additional annual water sales revenues, a 9.56 percent increase. North McLean presented financial exhibits in the Application that show how North McLean calculated the amount of the requested revenue increase. The exhibits are summarized below in condensed form.

| Pro Forma Operating Expenses                         | \$  | 655,798   |
|--|-----|-----------|
| Plus: Average Annual Principal and Interest Payments |     | 20,698    |
| Additional Working Capital                           |     | 4,140     |
|  |     |           |
| Overall Revenue Requirement                          |     | 680,636   |
| Less: Other Operating Revenue                        |     | (12,949)  |
| Non Operating Revenue                                |     | (6,966)   |
| Interest Income                                      |     | (3,438)   |
| *  |     |           |
| Revenue Required from Rates                          |     | 657,283   |
| Less: Pro Forma Present Rate Service Revenues        |     | (600,014) |
|  |     |           |
| Required Revenue Increase                            | _\$ | 57,269    |
| Percentage Increase                                  |     | 9.54%     |
|  | _   |           |

To determine the reasonableness of the rates requested by North McLean, Staff performed a limited financial review of North McLean's test-year operations. The scope of Staff's review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable changes to test-year operations were identified and adjustments were made when their effects were deemed to be material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

<sup>&</sup>lt;sup>3</sup> The calculation of \$41.83 is based on customer usage of 7,000 gallons rather than 6,539 gallons as stated in the customer notice.

<sup>&</sup>lt;sup>4</sup> Revenue from Proposed Rates, \$657,999 - Revenue from Present Rates, \$600,597 = \$57,402. Application, ARF Form 1 – Attachment BA-DB – September 2011.

Commission Staff's ("Staff") findings are summarized in this report. Ariel Miller and Travis Leach reviewed the calculation of North McLean's Overall Revenue Requirement. Eddie Beavers reviewed North McLean's reported revenues and rate design.

#### Summary of Findings

- 1. Overall Revenue Requirement and Required Revenue Increase. By applying the Debt Service Coverage ("DSC") method, as generally accepted by the Commission, Staff found that North McLean's Overall Revenue Requirement is \$704,146 and that an \$80,196 revenue increase, or 13.35 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.
- 2. <u>Water Service Rates</u>. In the Application, North McLean District proposed to increase all of its monthly water service rates evenly across the board by approximately 9.54 percent. The Commission has previously found that the allocation of a revenue increase evenly across the board to a utility's current rate design is appropriate and equitable method of cost allocation in the absence of a cost-of-service study. Finding no evidence of a cost-of-service study having been performed in this case, Staff followed the method proposed by North McLean District and allocated the \$80,196 revenue increase Staff found warranted evenly across the board to North McLean District's current monthly water service rates. Shown in the Attachment to this report are the monthly water service rates as calculated by Staff. These rates would increase a typical residential customer's monthly bill from \$41.83 to \$47.42, an increase of \$5.59, or approximately 13.36 percent.

#### Pro Forma Operating Statement

North McLean's Pro Forma Operating Statement for the test year ended December 31, 2016, as determined by Staff, appears below.

| Operating Payonyas                                     | Test Year            | Adjustment  | (Ref.) | Pro Forma            |  |
|--|----------------------|-------------|--------|----------------------|--|
| Operating Revenues Sales of Water Other Water Revenues | \$ 600,014<br>19,915 | \$ 583      | (A)    | \$ 600,597<br>19,915 |  |
| Total Operating Revenues                               | 619,929              | 583         |        | 620,512              |  |
| Operating Expenses Operation and Maintenance Expenses  |                      |             |        |                      |  |
| Salaries and Wages - Employees                         | 165,818              | 3,520       | (B)    | 169,338              |  |
| Salaries and Wages - Commissioners                     | 15,600               | -,          | \-/    | 15,600               |  |
| Purchased Water  | 301,542              | 35,546      | (C)    |                      |  |
|  |                      | (16,382)    | (D)    | 320,706              |  |
| Purchased Power for Pumping                            | 4,986                | (242)       | (D)    | 4,744                |  |
| Materials and Supplies                                 | 25,368               | (/          | 1-1    | 25,368               |  |
| Contractual Services - Acct                            | 5,945                |             |        | 5,945                |  |
| Contractual Services - Legal                           | 105                  |             |        | 105                  |  |
| Contractual Services - Water Testing                   | 2,898                |             |        | 2,898                |  |
| Contractual Services - Other                           | 21,570               |             |        | 21,570               |  |
| Rental of Bldg   | 2,060                |             |        | 2,060                |  |
| Transportation Expense                                 | 10,260               |             |        | 10,260               |  |
| Insurance - Worker's Comp                              | 4,092                |             |        | 4,092                |  |
| Insurance - Other                                      | 8,544                |             |        | 8,544                |  |
| Advertising  | 560                  |             |        | 560                  |  |
| Bad Debt Expense                                       | 2,294                |             |        | 2,294                |  |
| Miscellaneous Expense                                  | 3,393                |             |        | 3,393                |  |
| Total Operation and Maintenance Expenses               | 575,035              | 22,442      |        | 597,477              |  |
| Taxes Other Than Income                                | 16,020               |             |        | 16,020               |  |
| Depreciation   | 64,743               |             |        | 64,743               |  |
| Total Operating Expenses                               | 655,798              | 22,442      |        | 678,240              |  |
| Net Operating Income                                   | (35,869)             | (21,859)    |        | (57,728)             |  |
| Interest Income  | 3,438                |             |        | 3,438                |  |
| Income Available to Service Debt                       | \$ (32,431)          | \$ (21,859) |        | \$ (54,290)          |  |

(A) <u>Billing Analysis Adjustment</u>. North McLean provided a billing analysis that based the water usage and water sales revenue for the entire 12-month test year with its application. Staff has reviewed North McLean's billing analysis provided in the Application and finds that the water sales revenues determined by the billing analysis of \$600,597 for all customers is an accurate representation of normalized test-year revenue from water sales; therefore, Staff has increased water sales revenue by \$583.

(B) Employee Benefits. In the test year, North McLean reported \$16,160, in its Salaries and Wages – Employees account, for reimbursements made to employees in order to allow them to purchase single coverage health insurance. The amount of the reimbursement is based on the employee with the highest premium, therefore, effectively 100 percent of each employees' monthly premiums are paid. North McLean has four full-time employees who are receiving a health insurance reimbursement. As shown below, Staff annualized the most recent reimbursement being received by each full-time employee at the time of Staff's review.<sup>5</sup>

| Current Reimbursement for Full-time Employees<br>Times: 12 Months | \$<br>1,640<br>12      |
|---|------------------------|
| Annualized Reimbursement<br>Less: Test Year                       | <br>19,680<br>(16,160) |
| Increase  | \$<br>3,520            |

(C) Change of Water Supplier. Subsequent to the test year, North McLean began purchasing water from a new supplier, McLean County Regional Water Commission ("McLean County"). Pursuant to the contract, the purchased water rate from McLean County is \$2.68 per 1,000 gallons. North McLean's previous supplier, the city of Calhoun, no longer sells or produces water. Staff has adjusted Purchased Water Expense to account for the increase in purchased water cost as a result of the change in supplier as shown below.

<sup>&</sup>lt;sup>5</sup> Upon reviewing North McLean's total compensation package, no adjustment to benefits was made.

| Gallons Billed/1000<br>Times: Purchased Water Rate  | _\$ | 125,779<br>2.68      |
|---|-----|----------------------|
| Purchased Water Cost at New Rate<br>Less: Test Year |     | 337,088<br>(301,542) |
| Adjustment  | \$  | 35,546               |

(D) Excess Water Loss. Using information provided in North McLean's Annual Report, Staff determined that North McLean's test-year water loss was 19.86 percent,<sup>6</sup> or 4.86 percent above the 15 percent allowed by 807 KAR 5:066, Section 6(3), for ratemaking purposes. As calculated below, Staff removed the costs to purchase and pump water loss that was above the allowable limit.

|                 |            | Times: Excess |             |
|-----------------|------------|---------------|-------------|
|                 |            | Water         |             |
|                 |            | Loss          |             |
|                 | Test Year  | Percentage    | Decrease    |
| Purchased Water | \$ 337,088 | -4.86%        | \$ (16,382) |
| Purchased Power | 4,986      | -4.86%        | (242)       |

Water Purchased 125,779,000
Less: Water Sold (100,640,000)
Other Water Used (155,000)

Water Loss 24,984,000
Water Loss Percentage 19.86%

### Overall Revenue Requirement and Required Revenue Increase

The Commission has historically applied a DSC method to calculate the Overall Revenue Requirement of water districts and water associations. This method allows for recovery of: 1) cash related pro forma operating expenses; 2) recovery of depreciation expense, a non-cash item, to provide working capital; 7 3) the average annual principal and interest payments on all long-term debts; and 4) working capital that is in addition to depreciation expense.

A comparison of North McLean's and Staff's calculations of the Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below.

<sup>&</sup>lt;sup>7</sup> The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds for renewing and replacing assets. See Public Serv. Comm'n of Kentucky v. Dewitt Water Dist., 720 S.W.2d 725, 728 (Ky. 1986). Although a water district's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district's general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. See Case No. 2012-00309, Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities (Ky. PSC Dec. 21, 2012).

|  | North<br>McLean                           |    | Staff                          |            |
|--|---|----|--------------------------------|------------|
| Pro Forma Operating Expenses Plus: Average Annual Principal and Interest Payments Additional Working Capital | \$ 655,798<br>20,698<br>4,140             | \$ | 678,240<br>21,589<br>4,318     | (1)<br>(2) |
| Overall Revenue Requirement Less: Other Operating Revenue Non Operating Revenue Interest Income              | 680,636<br>(12,949)<br>(6,966)<br>(3,438) | ,  | 704,146<br>(19,915)<br>(3,438) |            |
| Revenue Required from Rates<br>Less: Pro Forma Present Rate Service Revenues                                 | 657,283<br>(600,014)                      |    | 680,793<br>(600,597)           |            |
| Required Revenue Increase<br>Percentage Increase   | \$ 57,269<br>9.54%                        | \$ | 80,196<br>13.35%               |            |

(1) Average Annual Principal and Interest Payments. North McLean currently has one outstanding bond, payable to the United States Department of Agriculture Rural Development ("RD"). In its Application, North McLean calculated an annual debt service payment of \$20,698, which it used in its calculation of the revenue requirement. Staff finds, as shown below, that the average annual debt payment to be included in calculating North McLean's Overall Revenue Requirement should be the five-year average of the annual principal and interest payments on these loans during the years 2018 through 2022. This five-year average of \$21,589 will allow North McLean recovery of the debt

payments that will be made during the anticipated life of the rates authorized by the Commission in this proceeding.8

Five-Year Average of Debt Payments Annual Debt Year Payment 2018 21,455 2019 21,502 2020 21,473 2021 21,367 2022 22,147 Total 107,943 5 Divide by: 5 years Average Annual Principal and Interest Payment \$ 21.589

(2) Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by a district's lenders that are above its average annual debt payments. In addition to depreciation expense, North McLean requested recovery of an allowance for working capital that is equal to 120 percent of its average annual debt payments.

RD requires that North McLean charge rates that produce net revenues that are at least 120 percent of its average annual debt payments. Following the Commission's

<sup>&</sup>lt;sup>8</sup> Generally, the anticipated life of a utility's service rates is based on the frequency of the utility's previous rate case filings, but no longer than five years, since rates tend to become obsolete due to changes that will likely occur to the utility's cost of service in a five-year period.

A review of the Commission's electronic docket system shows that North McLean last adjusted its monthly water service rates pursuant to 807 KAR 5:001 Section 16 in 2001, in Case No. 2001-00226, or, approximately 16 years ago. Therefore, Staff finds that the anticipated life of the rates approved in this proceeding is five years.

historic practice, Staff recalculated North McLean's allowance for additional working capital, based on a DSC ratio of 1.20, to be \$4,318, as shown below.<sup>9</sup> Staff included this amount in the calculation of North McLean's Overall Revenue Requirement.

| Average Annual Principal and Interest Times: DSC Coverage Ratio                     | \$<br>21,589<br>120%   |
|---|------------------------|
| Total Net Revenues Required<br>Less: Average Annual Principal and Interest Payments | <br>25,906<br>(21,589) |
| Additional Working Capital  | \$<br>4,318            |

<sup>&</sup>lt;sup>9</sup> Inclusion of the additional working capital in North McLean's revenue requirement is not necessary for it to earn revenues that meet the minimum DSC ratio required by its lenders. As depreciation is a noncash item, it is excluded from the ratio calculation, which is actually a measure of cash flow. As shown below, North McLean's minimum DSC ratio is met with or without the inclusion of additional working capital.

|  | With | n Additional | Ac   | dditional   |
|--|------|--------------|------|-------------|
|  | Wor  | king Capital | Work | ing Capital |
| Overall Revenue Requirement              | \$   | 704,146      | \$   | 699,828     |
| Less: Operating and Maintenance Expense  |      | (597,477)    |      | (597,477)   |
| Taxes Other Than Income                  |      | (16,020)     |      | (16,020)    |
| Net Revenues                             |      | 90,649       |      | 86,332      |
| Divided by: Average Annual Debt Payments |      | 21,589       |      | 21,589      |
| DSC Ratio                                |      | 420%         |      | 400%        |

# Signatures

Prepared by: Ariel Miller Water and Sewer Branch Division of Financial Analysis

Prepared by: Travis Leach Water and Sewer Branch Division of Financial Analysis

Prepared by: Eddie Beavers Water and Sewer Branch Division of Financial Analysis

# **ATTACHMENT**

# ATTACHMENT TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00253 DATED **OCT 1 8 2017**

# Monthly Water Rates

| First | 2,000  | Gallons | \$16.87 | Minimum bill      |
|-------|--------|---------|---------|-------------------|
| Next  | 8,000  | Gallons | 6.11    | per 1,000 Gallons |
| Next  | 30,000 | Gallons | 5.54    | per 1,000 Gallons |
| Over  | 40,000 | Gallons | 4.99    | per 1,000 Gallons |

\*North McLean County Water District 217 Hill Street P. O. Box 68 Livermore, KY 42352

\*Tiffany Sallee North McLean County Water District 217 Hill Street P. O. Box 68 Livermore, KY 42352